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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,635	07/23/2003	Harry D. Cox	BUR919990240US3	8067
7590	04/07/2006		EXAMINER	
James M. Leas IBM Corporation Intellectual Property Law 972E 1000 River Essex Junction, VT 05452			IM, JUNGHWA M	
			ART UNIT	PAPER NUMBER
			2811	
			DATE MAILED: 04/07/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/625,635	COX ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Junghwa M. Im	2811

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 25 January 2006.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 39,41-46 and 51 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 39,41,42,45,46 and 51 is/are rejected.

7)  Claim(s) 43 and 44 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892) 4)  Interview Summary (PTO-413)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. \_\_\_\_\_  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Objections***

Claims 45-46 are objected to because of the following informalities: claim 45 is dependent on the cancelled claim 40. Claim 46 recites “said covering” without an antecedent basis. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 39, 41-42 and 45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 39 recites a limitation of “said improved contact processing of said perimeter chips is additional dummy solder bumps to support a second shadow mask.” It is unclear how the contact processing of the chips is equivalent to the dummy solder bumps which are elements, not an act of the processing.

Claim 41 recites a limitation of “said additional holes in the shadow mask located adjacent holes corresponding to most of said perimeter chips are dummy holes.” It is unclear since the instant invention does not disclose this aspect. Claim 41 further recites a unclear limitation of “said additional dummy holes are omitted ... beyond said dummy holes.” This is

confusing since the instant invention recites contact holes and additional dummy holes, not contact holes, dummy holes and additional dummy holes.

Claim 42 recites a limitation of "... inspecting the shadow mask using dummy holes along an edge of a dicing lane." Note that the instant invention does not disclose this aspect. Rather, the instant invention discloses that more additional holes are added to use the inspection tool. Also note that the instant invention does not disclose dummy holes along an edge of the dicing lane.

Claim 45 recites a limitation of "... inspecting the shadow mask using a covering ..." Note that the instant invention does not disclose this aspect.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 39, 41-42, 45-46 and 51 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 10-12 of U.S. Patent No. 6,76,621 in view of Okazaki (US 6,293,270).

Regarding claims 41 and 51, in comparison of pending claims 41 and 51, for example, and the patented claims 1-2, the only the difference is that pending claims recites that additional dummy holes are omitted in the saw blade lanes and in a ring shaped excursion. Fig. 3A of Okazaki shows a wafer wherein contacts/solder bumps are omitted in the saw blade lanes [13] and in a ring shaped excursion [4]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teachings of Okazaki into the device of '621 patent in order to have additional dummy holes omitted in the saw blade lanes and in a ring shaped excursion to prevent the damage of the wafer. Furthermore, the limitation that additional dummy holes are omitted in the saw blade lanes and in a ring shaped excursion are recited in claims 9-12 of '621 patent.

Pending claim 39 is recited in claim 7 of '621 patent.

Regarding claim 42, insofar as understood, Fig. 3A of Okazaki shows the dicing lanes.

Regarding claims 45-46, insofar as understood, Fig. 3A of Okazaki show a wafer ring/covering [4].

#### *Allowable Subject Matter*

Claims 43-44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

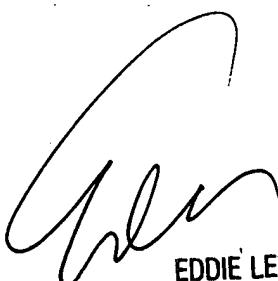
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Junghwa M. Im whose telephone number is (571) 272-1655. The examiner can normally be reached on MON.-FRI. 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie C. Lee can be reached on (571) 272-1732. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jmi



EDDIE LEE  
SUPERVISORY PATENT EXAMINER  
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